AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A sintered ferrite body having a main composition comprising 68-75% by mol of Fe_2O_3, and 3-12% by mol of ZnO, the balance being manganese oxide; R_{cal} determined from the Fe_2O_3 content X (% by mol) by the formula (1) of $R_{cal} = [200(X-50)]/(3X)$, and the ratio R (%) of Fe^{2+} per the total amount of Fe in said sintered body meeting the condition of $R_{cal} - 2.0 \leq R \leq R_{cal} + 0.3$; said sintered body having a density of 4.9 g/cm^3 or more; and said sintered ferrite body having a maximum magnetic flux density of ~~540~~ 544 mT or more measured at 100°C in a magnetic field of 1000 A/m.

2. (canceled).

3. (previously presented): The sintered ferrite body according to claim 1, comprising 0.02-0.3% by weight (calculated as $CaCO_3$) of Ca, and 0.003-0.015% by weight (calculated as SiO_2) of Si, as sub-components, per 100% by weight of the main composition.

4. (previously presented): The sintered ferrite body according to claim 1, wherein said sintered ferrite body has volume resistivity of 0.1 Ω·m or more.

5. (previously presented): The sintered ferrite body according to claim 1, wherein said sintered ferrite body has a minimum-core-loss temperature of 80°C-120°C.

6. (previously presented): An electronic part formed by winding a wire around a magnetic core comprising the sintered ferrite body recited in claim 1.

7. (currently amended): A method for producing a sintered ferrite body having a main composition comprising 68-75% by mol of Fe_2O_3, and 3-12% by mol of ZnO, the balance being manganese oxide; R_{cal} determined from the Fe_2O_3 content X (% by mol) by the formula (1) of $R_{cal} = [200(X-50)]/(3X)$, and the ratio R (%) of Fe^{2+} per the total amount of Fe in the sintered body meeting the condition of $R_{cal} - 2.0 \leq R \leq R_{cal} + 0.3$; said sintered body having a density of 4.9 g/cm^3 or more; and said sintered ferrite body having a maximum magnetic flux density of ~~540~~ 544 mT or more measured at 100°C in a magnetic field of 1000 A/m, said method comprising a step of adding a binder to ferrite powder, a molding step, a binder-removing step and a sintering step, said ferrite powder having a spinelization ratio S of 10-60%; the amount V (% by weight) of said binder added being in a range of $1.3 - 0.02S \leq V \leq 2.3 - 0.02S$, assuming that the total amount of said ferrite powder and said binder is 100% by weight; the oxygen concentration in the atmosphere from said binder-removing step to the completion of said sintering step in a temperature range of 1150-1250°C being 0.1% or less by volume.

8. (original): The method for producing a sintered ferrite body according to claim 7, wherein said spinelization ratio of ferrite powder is 10-40%.

9. (previously presented): The method for producing a sintered ferrite body according to claim 7, wherein said ferrite powder has a specific surface area of 3000-7000 m^2/kg.

10. (canceled).

11. (previously presented): The method for producing a sintered ferrite body according to claim 7, wherein 0.02-0.3% by weight (calculated as $CaCO_3$) of Ca, and 0.003-0.015% by weight (calculated as SiO_2) of Si are added as sub-components to 100% by weight of said main composition.

12. (canceled).

13. (previously presented): The sintered ferrite body according to claim 1, wherein said sintered ferrite body has a reduction ratio of a maximum magnetic flux density from 20°C to 100°C of 10% or less.

14. (canceled).

15. (canceled).